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EXAMINER	
HESS, DANIEL A	

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2876	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental Office Action Summary	Application No. 10/611,563	Applicant(s) BERARDI ET AL.	
	Examiner Daniel A. Hess	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/20/05 applicant interview*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 30-60* is/are rejected.

7)☒ Claim(s) *24-29* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

This action is a supplemental action. The previous action did not address five of the sixty claims by the applicant, namely claims 12, 14, 24, 26 and 27. Therefore the applicant is entitled to a supplemental action.

Claim Objection

Claim 24 repeats the phrase 'protocol sequence controller' redundantly. The appearance of this phrase on the last line of claim 24 should be removed.

Claim Rejections - 35 USC § 112

Claims 16-18 and 20-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Each of the above claims includes a reference to a particular brand of dye and a name used in marketing the dye. The makeup of the dye could change, and thus the meaning of the claim could change.

In order to make the above claims definite, actual chemical compositions would need to be conveyed.

Claim Rejections - 35 USC § 103

Claims 1, 2, 4, 5, 7-10, 13, 14, 19, 23, 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilmer et al. (GB-A-1,371,254) and Tuttle et al. (US 5,988,510) in view of each other.

Re claim 1: Kilmer teaches a card that is transparent in the visible range (page 1, line 37). There are a plurality of layers: a first layer, PVC that is permeable in visible and infrared (page 1, lines 40-46) and a second layer of PVAC that is permeable in the visible but machine recognizable in the infrared (page 1, lines 46-50). Machine readability is based on gallium arsenide detectors (page 1, line 35, 55-60 and 75-80). There is coding in the form of perforations (punched holes in the PVAC layer – page 1, line 58).

Kilmer fails to teach that the card contains one or more transponders receiving an interrogation signal, an authentication circuit, and a database for storing transponder system account data, the database being in communication with the transponder system.

Tuttle teaches (entire document) a card with and RFID transponder system (column 9, lines 5-15): "The memory 164 receives power when the integrated circuit 154 receives power. In one embodiment, the integrated circuit 154 further includes **transponder circuitry for radio frequency communications with an interrogator unit** 104. " Tuttle also shows that such smart cards can be used to **gain access**, an application which necessarily (column 1, lines 50-60): "Smart cards can also be used as keys to gain access to restricted areas, such as secure areas of buildings, or to access parking lots." Regarding the limitations of receiving an interrogation signal, authenticating the signal and transmitting account data, this is all standard. This simply

means that communication with the transponder card is made and then an ID is transmitted from the card. Any card that is used to gain access must transmit an ID. The process of gaining access *is* authentication, and an circuit that is involved in this process would therefore be an authentication circuit. A database system with which to communicate is also inherent because in order to decide whether to grant access, the system must check if a person seeking to gain access is a valid user.

In view of Tuttle's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the old and well-known transponders-based access system (including interrogation and implicit database) of Tuttle with the card of Kilmer because this permits sophisticated data exchange with the card by radio.

Alternatively, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known clear coating of Kilmer into the card of Tuttle in order to make the card more visually appealing and aesthetically interesting.

Re claim 2: The claim recites many types of cards, all of which Kilmer's system could be used for.

Re claims 4/5: There is coding in the form of perforations (punched holes in the PVAC layer – page 1, line 58).

Re claim 7: The presence of a second RF interrogation system would have been an obvious repetition of parts in case a first interrogation system failed.

Re claim 8: Polymers are simply plastics, which are notoriously old and well known in cards.

Re claim 9/10/14: See Kilmer, page 1, lines 46-50: The infrared (i.e. invisible) compound is at least a chemical.

Re claim 13: Infrared is optically recognizable.

Re claim 14: The infrared material would block infrared light from passing through.

Re claim 19: PET plastic is a known material in the art to achieve durability: Riedl (US 5,928,788) uses PET compounds (column 2, line 52) and notes (column 1, lines 45-50) that they improve the temperature resistance and physical durability of the card as well as enhance recyclability.

In view of Riedl's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known PET because PET compounds produce a more durable card.

Re claim 23: As for having multiple transponders, this can be considered repetition of parts, with the clear advantage of redundancy in case one system breaks. One would have been motivated to have such a system so that two communication channels can be open simultaneously, increasing bandwidth, in the same way that a computer network has more bandwidth with more pathways.

Re claim 30: Batteries in smart cards have long been known; there are many examples thereof.

Re claims 31/32: Cards with biometric security are old and well-known in the art; the motive is added security. See for example, US 6,494,380.

Re claim 33: The card resulting from the combination of Kilmer and Tuttle re claim 1 above meets the limitations of claim 33.

Re claim 34: See discussion re claim 2 above.

Re claim 35: Kilmer uses what can be considered a coating.

Claims 3, 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilmer as modified by Tuttle as applied to claim 1 above, in further view of Koshizuka et al. (US 5,407,893).

Kilmer/Tuttle lacks a teaching that the 2nd layer is extrusion-coated to the first.

Koshizuka teaches (column 10, lines 15-16 and 19-20) extrusion coating to bond layers together.

In view of Koshizuka's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known extrusion coating as taught by Koshizuka into the teachings of Kilmer because this helps achieve high stiffness and excellent durability (Koshizuka , column 1, lines 5-10).

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilmer/Tuttle as applied to claim 1 above, in further view of Wessel (US 4,583,766)

Re claim 11: Wessel (US 4,583,766) teaches infrared inks as a blocking material in a transparent card.

In view of Wessel's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute the old and well-known infrared ink of

Wessel for the infrared material of Kilmer because inks can be easily and rapidly printed on a surface.

Re claim 12: The range given for concentration of ink is very large and normal experimentation would likely arrive at a concentration somewhere in this very large range.

Claims 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kilmer/Tuttle as applied to claim 1 above, in view of Blumel et al. (US 4,672,021).

Kilmer/Tuttle fails to specifically point out the presence of one of a binder, UV absorber, reflector, antioxidant, optical brightener, color shifter, chemical to improve processing, or a chemical to adjust rheological properties.

Blumel shows (see title; abstract, lines 8-11) a layer compound applied to a substrate having dye and a binder.

In view of Blumel's teachings, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known binder in a dye compound which is applied to a surface as taught by Blumel because, a binder helps facilitate sticking to the surface on which a compound is placed, and it is desirable to have a infrared-blocker stick permanently to the surface of the card of Kilmer.

Claims 36-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kilmer as modified by Tuttle as applied to claim 1 above, in further view of Kiekhaefer (US 6,290,137).

Re claims 47-53, 59, 60 and other claims reciting the limitation, '... substantially covering ...': Kilmer/Tuttle fails to teach that the IR machine recognizable compound covers the entire surface of the card.

Kiekhaefer (see entire document) teaches exactly this in a clear card.

In view of Kiekhaefer's teaching, it would have been obvious to one of ordinary skill in the art at the time the invention was made to include the old and well-known total coverage with an IR blocking material as taught by Kiekhaefer in the teachings of Kilmer/Tuttle because this improves machine detection of a clear card, a goal in Kiekhaefer.

Re claim 36: Kilmer/Tuttle teach most of the claimed limitations. It is notoriously old and well-known in the art that both magnetic stripes and holograms can be added to cards for added information-bearing and/or security.

Re claim 37: See discussion re claim 19 (i.e. Riedl) on the use of PET layers for strength / durability.

Re claim 38: Adhering card layers with adhesive or laminate is a technique which is employed in the vast majority of all plastic cards.

Re claim 39/40: See discussion re claim 1, above.

Re claim 41: Most limitations have been met in the discussion of claim 1, above. See discussion of claim 19 for use of PET layers.

Re claim 42: Most limitations have been met in the discussion of claim 1, above. PVC plastic is just one of many materials which can be used in cards for sturdiness and durability.

Re claims 43-46: The limitations of these claims have been taught in one form or another among the claims listed above.

Re claims 54-58: The presence of a magnetic stripe in a transaction card is notoriously, old, well-known and was standard at the time of the invention.

Allowable Subject Matter

Claims 24-29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art of record fails to teach or fairly suggest a transparent card having two transponders, wherein there is a transponder system protocol/sequence controller configured to control the order of operation of the first transponder, second transponder, transponder system authentication circuit and transponder system database, the protocol sequence controller being in communication with at least one of said first transponder, second transponder, authentication circuit and transponder system database.

Response to Arguments

Regarding the applicant's concerns about the use of a trademark in certain claims, the examiner notes the following from 2173.05(u) of the MPEP:

"If the **trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply** with the requirements of the 35

U.S.C. 112, second paragraph. Ex parte Simpson, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. In fact, the value of a trademark would be lost to the extent that it became descriptive of a product, rather than used as an identification of a source or origin of a product. **Thus, the use of a trademark or trade name in a claim to identify or describe a material or product would not only render a claim indefinite, but would also constitute an improper use of the trademark or trade name.**"

Regarding the combination of a transparent card and an transponder-based access card, the examiner notes that both of these were separately known, and the motivation for the combination would be to obtain the benefits of each: in the case of the clear card, benefits include aesthetic appeal and in the case of of a transponder-based access card, the benefits include rapid access to facilities or systems which require access.

The act of combining the two above cards appears to present little technical difficulty (assuming that one is able to achieve each separately). The transparent surface is made of plastics and can simply substitute for the existing plastic of known transaction cards.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel A. Hess whose telephone number is (571) 272-2392. The examiner can normally be reached on 8:00 AM - 5:00 PM M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on (571) 272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DH
11/10/05

DANIEL STCYR
PRIMARY EXAMINER